

PHENIX WEEKLY PLANNING



3/7/2013
Don Lynch

TECHNICAL SUPPORT 2013

This Week

TECHNICAL SUPPORT 2013

- Run 13 Continues : run support maintenance
- Complete Rack Room AC Control Upgrade
- Maintenance access tomorrow (Friday)
 - Remove inner FVTX rad monitors ?
 - Close FVTX/VTX ?
 - Other tasks ?
- Continue VTX strip pixel stave re-design
- Continue sPHENIX support
- Continue MPC-Ex design

Next Week

TECHNICAL
SUPPORT
2013

- Run 13 Continues: run support maintenance
- No Scheduled maintenance next week
- 1st scheduled (2 week) maintenance day Wednesday 3/20
- Continue VTX strip pixel stave re-design
- Continue sPHENIX support
- Continue MPC-Ex design
- Future IR evolution modeling



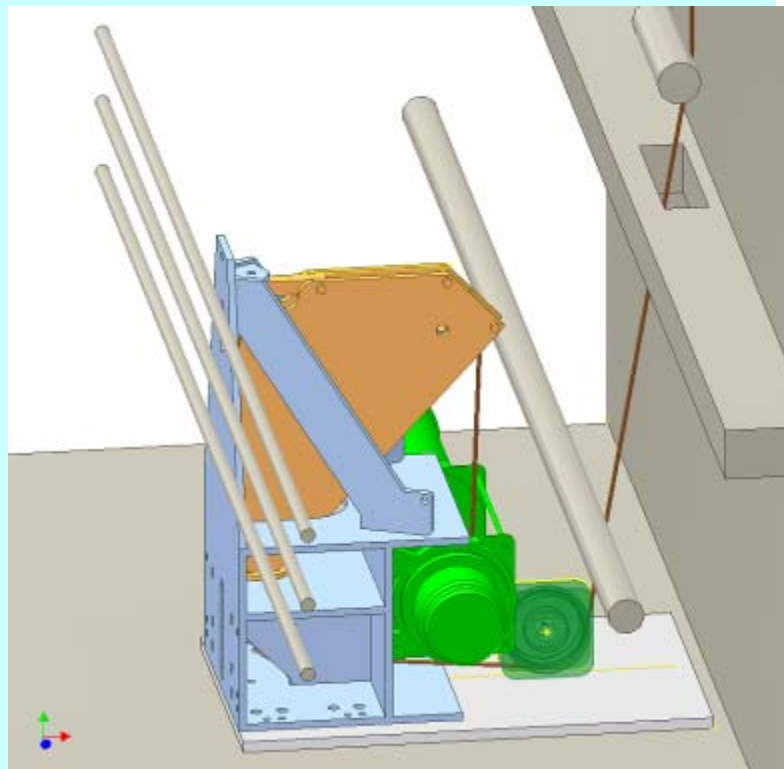
The two 10 ton units will have their Trane controls replaced with Automated Logic Corp. (ALC) controls.

Both units will be out of service during modification work for two weeks (in progress). Rack Room winter heat loads will be handled by the 30 ton and floor unit during this time.

Engineering work is in progress to eventually upgrade the 30 ton roof mounted unit controls and IR HVAC controls.

Window Washer Winch Upgrade

TECHNICAL SUPPORT 2013



Quotation #: 83944
Quotation Date: March 6, 2013
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Attention: Donald Lynch

Company: Brookhaven National Lab

Phone: 631-344-2253

Based on the information provided to us for an AC hoist to be used for lifting, we are pleased to propose the following:

Line	Qty.	Product:	Net Each	Extended
1	1	Columbia HF2100-2A17-L-03 AC Electric Hoist <ul style="list-style-type: none"> 2.0 HP TEFC UL-listed brakemotor 230/3/60 input power Automatic, load-suspending braking system Permanently lubricated, high-efficiency planetary gear reduction Argent gray enamel paint finish Includes single speed low voltage controls <ul style="list-style-type: none"> Reversing motor starter in a NEMA 4X fiberglass enclosure UL-listed Includes NEMA 4X hand-held pendant control with UP/DOWN momentary contacts and up to 15' lead 	\$5,022.00	\$5,022.00

Options:

Line	Qty.	Product:	Net Each	Extended
2	1	AutoAdvance Line Spooler <ul style="list-style-type: none"> Designed and built for Columbia HF2100-2A17-L-03 Incoming line from front of spooler Fabricated steel frame Sheaves are steel construction, grooved for 5/16" line Ensures proper line spooling regardless of fleet angle Rope tension must be maintained for proper operation 	\$3,298.00	\$3,298.00

Line	Qty.	Product:	Net Each	Extended
3	1	VLS-6 Vertical Lead Sheave <ul style="list-style-type: none"> 6,000 lbs load limit Can be bolted down or welded for installation Fabricated steel construction Offset design allows for simple installation at any angle Bronze bushed steel sheave grooved for 5/16" wire rope 	\$458.00	\$458.00

Line	Qty.	Product:	Net Each	Extended
4	1	Wire Rope <ul style="list-style-type: none"> 200' of 5/16" galvanized aircraft cable with latching hook Supplied loose 	\$158.00	\$158.00

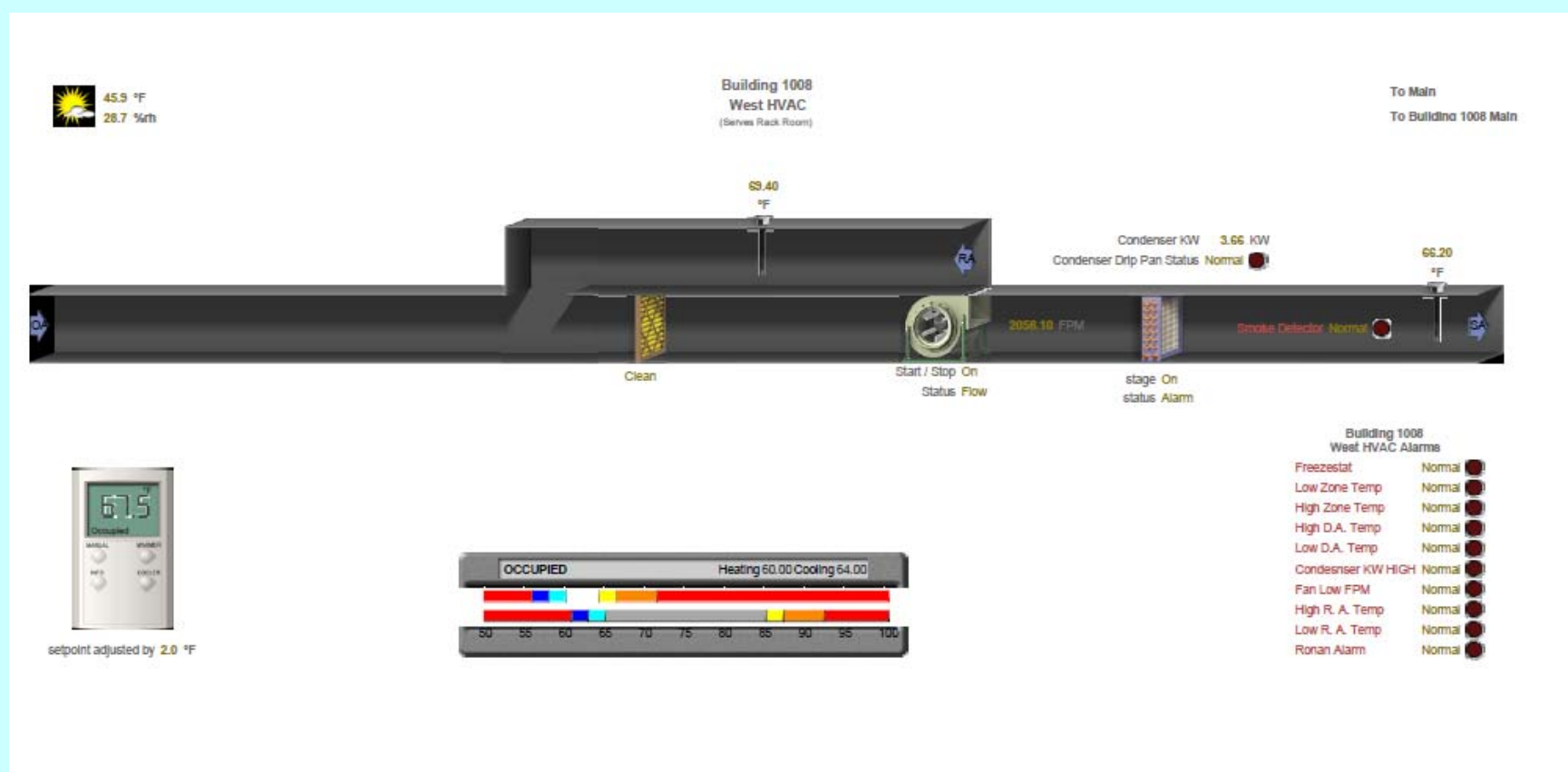
Total Estimated Material Cost: \$8396

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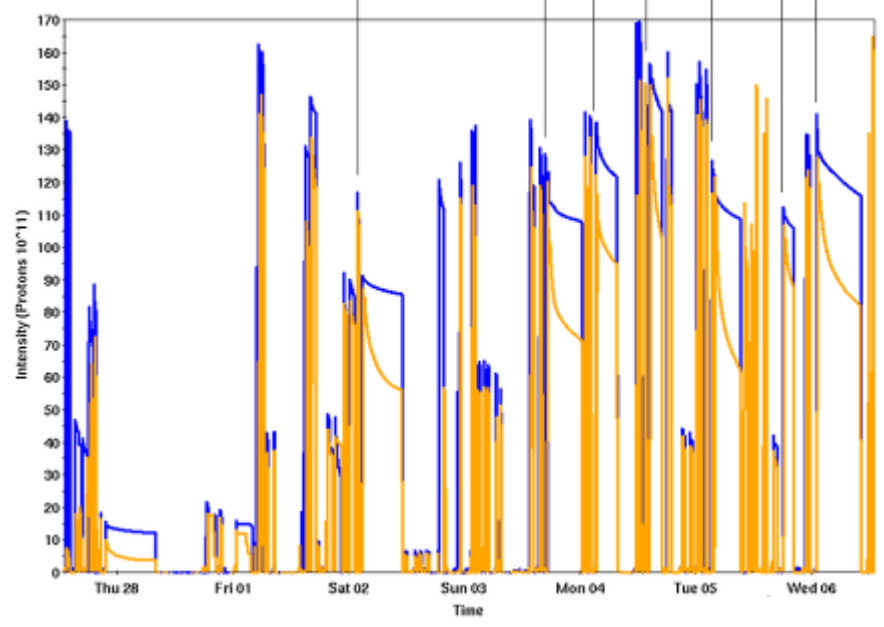
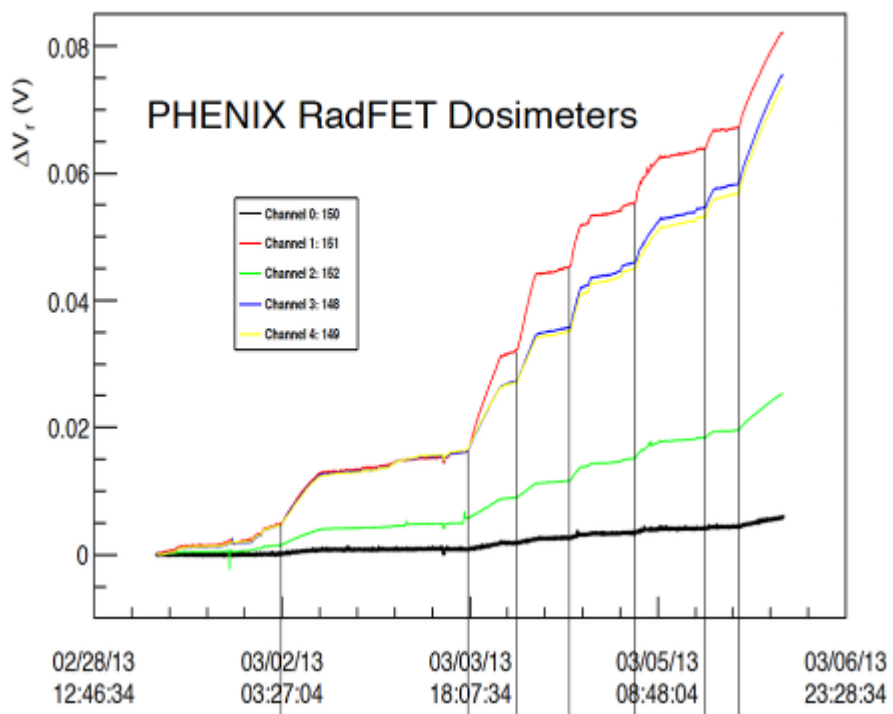


New 10 ton AC controls

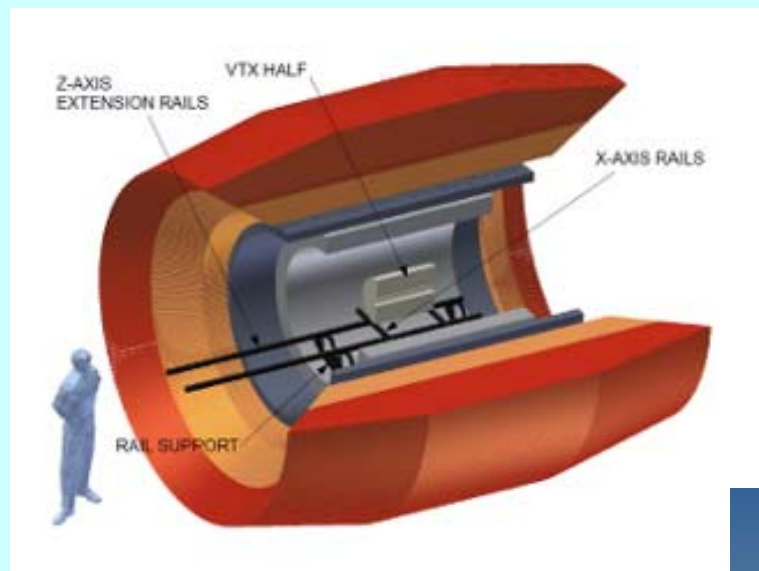
New 10 ton AC Web based controls



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FVTX Radiation Monitors
And RHIC Beam Activity

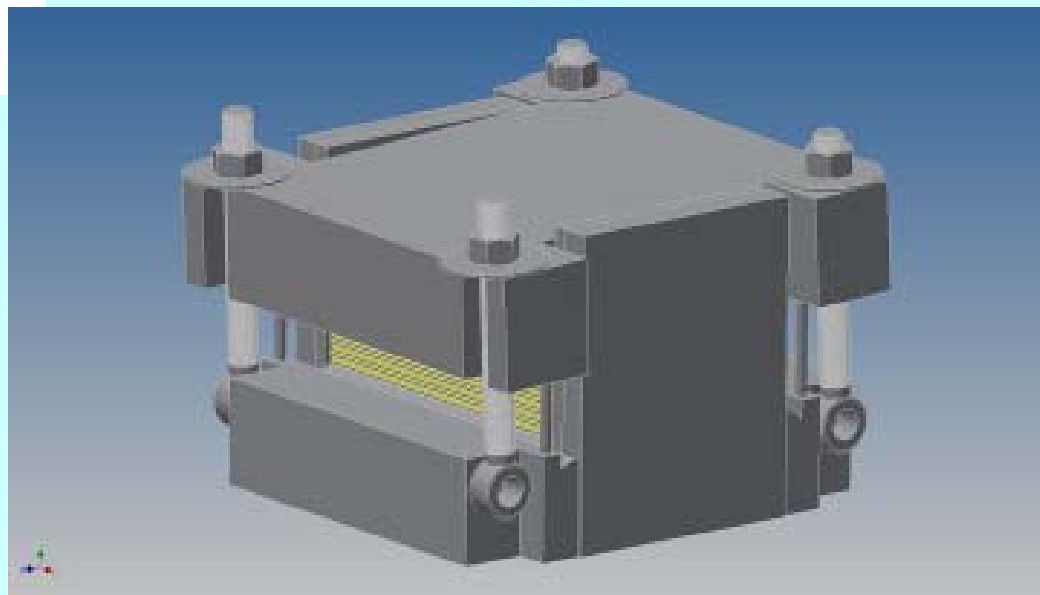


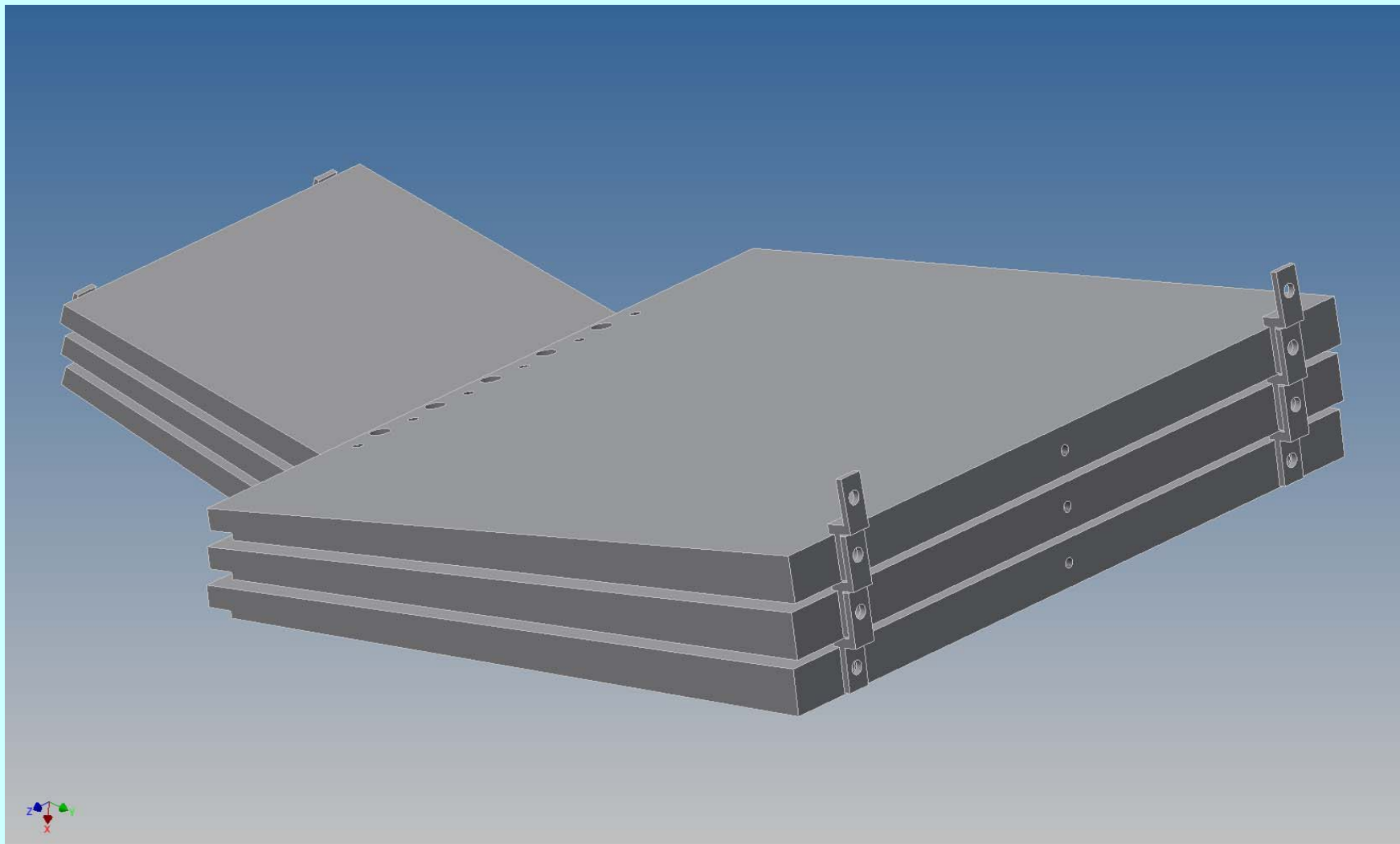
sPHENIX Proposed Upgrade

Work continues evaluating engineering tradeoffs for EMCal and HCal design, materials, etc.

Prototype HCal and EMCal in progress

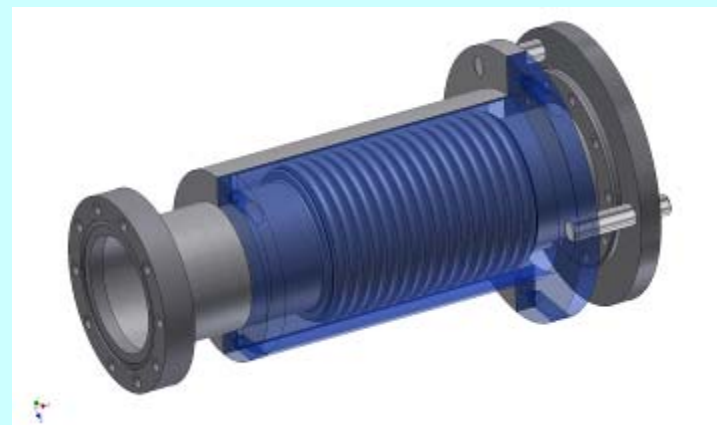
Quote from ATLAS for HCal prototype steel expected next week



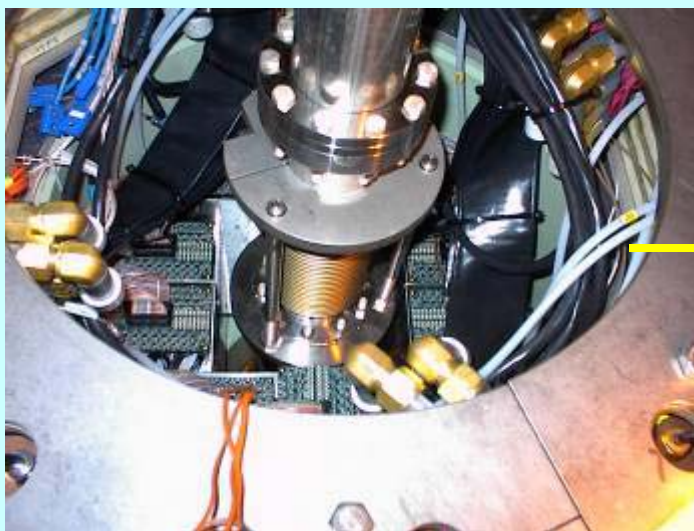




Existing vacuum bellows anti-squirm
In MPC S Cavity



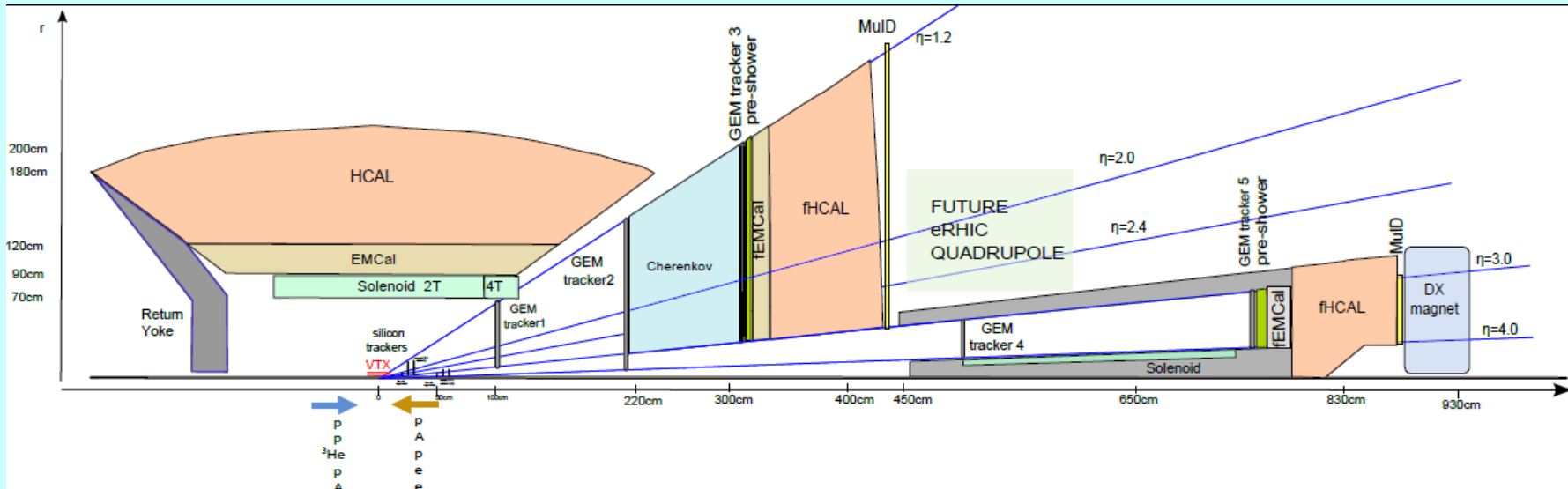
Proposed vacuum bellows anti-squirm
In MPC S Cavity to accommodate MPC-Ex



MPCS Flat cables replaced with round cables.

Future IR Evolution

TECHNICAL STUDY REPORT NO-3



TECHNICAL SUPPORT 2013

Prep for 2013 shutdown	2/11-6/30/2013
Design, Fabricate MPC-Ex	
Define tasks and goals	
Analysis and design of fixtures, tools and procedures	
Fabricate/procure tools and fixtures	
Tests, mockups, prototypes	
Receive, fabricate, modify, finish installables	
Review and approval of parts, tools, fixtures and procedures	
Assembly and QA tests	
End of Run Party	6/28/2013
Run 12 Ends	6/30/2013
Shutdown Standard Tasks	6/30-7/19/2013
• Open wall, disassemble wall, Remove MuID Collars,	
• Move EC to AH, etc.	
Disassemble VTX/FVTX services	7/1-7/19/2013
July 4 th Holiday	7/4/2013
Remove VTX/FVTX and transport to Chemistry Lab	7/22/2013
Assemble, Test and Install MPC-Ex (North only?)	7/22-10/1/2013
Summer Sunday (8/5) Prep and teardown	8/1-8/??/2013
Other detector maintenance as required	As required
Infrastructure maintenance as required	As required
TBD prototype tasks	As required
Summer Sunday (RHIC)	8/??/13

TECHNICAL SUPPORT NOTES

Labor Day Holiday	9/2/2013
Repair upgrade, reassemble VTX/FVTX	7/23-10/13/2013
Test, survey (at Chemistry and IR) and re-install VTX/FVTX	10/16-10/27/2013
Pre-run commissioning and prep for run 14	11/1-12/31/2012
Prep for EC roll in	11/1-11/9/2013
Roll in EC	11/10-11/12/2013
Prep IR for run	11/1-11/30/2013
Pink/Blue/White sheets	12/14-12/31/13
Start run 14	1/1/2014



1. PHENIX Annual Safety Review: action items
 - PHENIX to provide C-AD with a plan for continued use of the RPC factory (O'Brien, Lynch Feb 15, 2013)
 - Provide documentation on the upgraded NOVEC gas system (Pisani Feb 15, 2013)
 - Provide an assessment of the new gas system software, what QA rating and proposed configuration control (Pisani Feb 15, 2013)
2. Performance goals in progress?
3. From Ray Karol: PPE Selection must be considered for all work to protect yourself from harm or injury. The BNL SBMS has a document that describes all PPE available to staff. Look especially at the section on Hand Protection, Section 4 at:

PPE Descriptions and Design Requirements Standards

BNL (and C-AD) have had a few hand injuries in the past few months which may have been prevented or resulted in a more minor injury if hand protection PPE was considered. This should be a focus for all as you do your work planning, especially for worker-planned work.

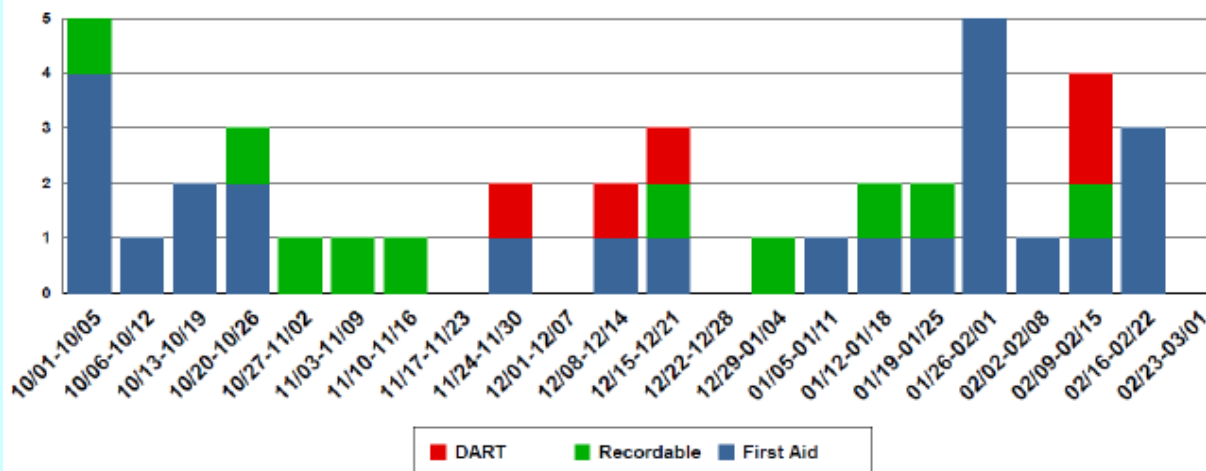
4. Annual EMS/OSH audit at CAD this week

5. Tier 1 safety walkthrough yesterday: No major problems

TECHNICAL SUPPORT NOTES



Injuries Per Week (FY) As of 3/1/2013



Injury Status:

FY13 YTD: DART – 5, TRC – 15, First Aid – 25

FY12: DART – 17, TRC – 35, First Aid – 70

FY11: DART – 30, TRC – 44, First Aid – 45

FY13 Injury Listing: <https://intranet.bnl.gov/esh/shsd/seg/OccInj/BNLIInjuries.aspx>

Recent Injuries

2/21/13	First Aid	An employee was injured when the vehicle he was in rolled over onto it's side. First aid was given by first responders and in the ER, x-rays were taken, but were negative for fracture. At the OMC, the worker was cleared to return to normal duties.
2/20/13	First Aid	An employee tripped and fell, injuring several body parts. At the OMC, first aid was given.
2/19/13	First Aid	An employee slipped and fell on a wet floor, injuring their arm. At the OMC, first aid was given.
2/14/13	DART	An employee injured an arm while turning a valve. At the OMC, the worker was examined and sent for x-rays. The employee continues to lose time for this incident.
2/11/13	Recordable	An employee reported left elbow pain from lifting equipment on site. He received a prescription for physical therapy at the OMC, and returned to work.
2/10/13	DART	An employee was removing snow when he slipped and fell on an icy surface and injured his knee. Employee is losing time from work.
2/10/13	First Aid	An employee slipped and fell, injuring an elbow. At the OMC, first aid was given.
2/7/13	First Aid	After turning on a machine, an employee received a small spray of e coli contaminated solution to the eye. The employee went to the OMC and had the eye flushed out.
2/1/13	First Aid	An employee reported to the OMC with pain in the right arm, wrist and hand, which has been developing over the last three weeks. An ergonomic evaluation of the work station was completed and the researcher was instructed to report to the OMC. At the OMC, first aid was given.
1/31/13	First Aid	An employee scraped her hand on a desk and received first aid at the OMC.

Safety and Security



3/7/2013

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Recent Events		
2/27/13	Non-Reportable	Recently BLIP targets bodies have been developing small failures allowing the activated materials to leak into the BLIP vessel water. This has been going on routinely through the years of BLIP operations. This resulted in no release that is harmful to people or the environment. C-AD engineering has been developing ways to reduce these failures including reducing proton beam current to the target, developing a cladding on the inside of the target casing to prevent possible corrosion by the gallium and is working on rastering the proton beam to reduce the peak target temperatures. (Event Link)
2/27/13	Non-Reportable	There were two separate power outages at BNL on 2/27/13. 1. B479: A 480V 400A feeder from the B479 substation to a power distribution panel on the north wall of 479 had a ground fault. That feeder has been isolated for later repair and the power to the rest of the building has been restored. Part of B479 has no power but this is being worked on. 2. B452 and B630: A pine tree partially fell on a 2400V line dropping power to B452 and B630. Tree trimming is in progress and power is expected to be restored. These events were independent from each other. (Event Link)
2/26/13	Non-Reportable	A Calibration Service Contractor was performing a visual smoke test using a mineral oil based compound to certify a Biological Safety Cabinet in Bldg 901 when some of the smoke escaped the cabinet and set off the local smoke detector. There was no fire. The contractor was escorted out of the building by his host along with the other building occupants. Fire/Rescue responded and cleared the alarm. (Event Link)
2/21/13	SC-BNL	A worker was traveling in a Kubota vehicle when he traversed an ice-covered portion of a dirt road near Bld. 1006B. The vehicle slid on the ice and rolled onto it's side. The driver reported discomfort in his shoulder and was transported to BMH as a precautionary measure. The vehicle appeared to be leaking some hydraulic fluid , so absorbent pads were applied around the scene, which is being preserved as found for investigation, before further remediation. The employee returned to the OMC on 2/21/13 and told them that BMH gave him Motrin and xrays. The xrays were negative. (Event Link)
2/20/13	Non-Reportable	An F&O staff member driving a Laboratory 2002 Ford F-150 pick-up truck backed into a parked private vehicle at Bld. 929. Snow was piled on both sides of the road, impairing visibility. There was minimal damage to the Lab vehicle, some damage to the private vehicle. There were no injuries. (Event Link)
2/7/13	Non-Reportable	On 2/7/13, a shipping container 'pig' was received from GE at Bld. 801 for use in shipping Strontium radioactive material. The incoming inspection determined that the container was internally contaminated. The container was returned. There was no personnel contamination or exposure above limits. Update 2/19/13 – The package radiation and contamination levels exceeded the level for an excepted package, which was a DOT violation. The shipper has been notified. (Event Link)



Where To Find PHENIX Engineering Info



Run 13 is humming along



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

